

DSP AUDIO PROCESSOR

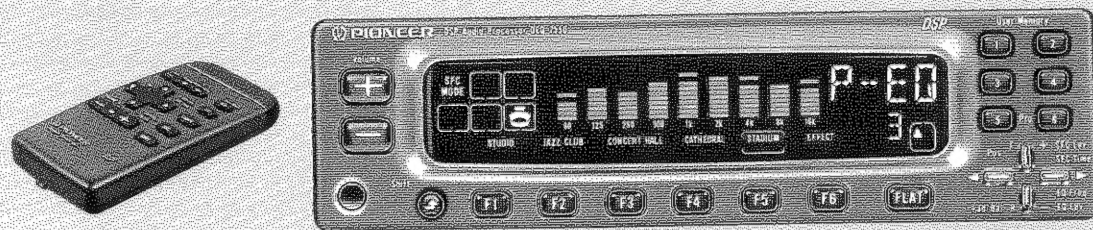
OWNER'S MANUAL

Thank you for purchasing this PIONEER product. Before attempting operation, be sure to read this manual.

Nous vous remercions d'avoir acheté cet appareil PIONEER. Avant de l'utiliser, prendre soin de lire ce manuel.

Muchas gracias por la adquisición de este producto PIONEER. Antes de tratar de operarlo, lea atentamente este manual.

شكراً لك على شرائك جهاز بايونير هذا. قبل محاولة تشغيله تأكد من قراءة هذا الدليل.



PIONEER
The Art of Entertainment

DEQ-7550

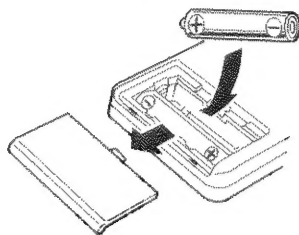
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Before Using Your DEQ-7550

Prepare the Remote Controller First Loading Batteries

Precautions When Loading Batteries



Note the following precautions when loading batteries into remote controller unit to avoid damage due to battery fluid leakage.

- Always check carefully that you are loading batteries with their \oplus and \ominus poles facing in the proper directions.
- Never mix old and new batteries. Always replace batteries with two new ones.
- Some batteries may appear to be identical but have different voltage ratings. Never mix battery types.
- Some batteries can be recharged and some cannot. Be sure to carefully read the label for the batteries you use.
- To avoid damage to the remote controller caused by battery leakage, remove the batteries from the remote controller if you do not plan to use it for more than one month. If you find that fluid has leaked, thoroughly wipe out the battery compartment and load a set of new batteries.

Please Read the Following Before Using the DEQ-7550

Adjusting the Volume

- The unit incorporates a volume adjustment function, which adjusts the total volume. Before attempting to use the unit for the first time, refer to "Before Adjusting the Volume" on page 9 to set the volume of the head unit at the desired level. Then, adjust the volume on the unit.

Note:

The volume on the head unit will return to the initial setting when you remove the car battery or press the clear button on the head unit. In this case, set the volume again.

Sound Field Control

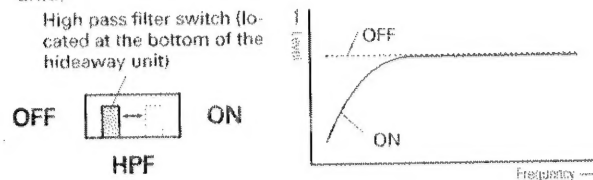
- With a 2 speaker system, use the unit's front output.

Memory Holding Function

The unit is able to hold memory (memory button information, SFC effect set point, listening position, image focus control, etc.) even when power has not been supplied for about one hour. Therefore, you do not need to reset controls after exchanging car batteries or making simple alterations to the car stereo connections.

High pass filter switch

- Some distortion may be audible in bass playback depending on the bass characteristics of the speakers and the way the speaker is installed. Turning on the high pass filter switch located at the bottom of the hide-away unit may reduce the distortion as it may restrain the bass sound level of the unit's signal output. Compare the sound quality and switch to the desired level.
High pass filter switch (located at the bottom of the hide-away unit.)

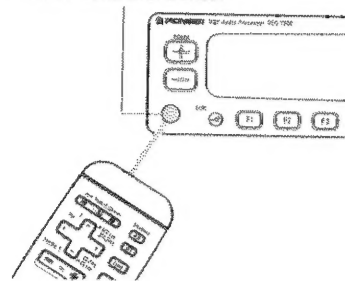


Using the Remote Controller

Precautions

- Keep the remote controller unit in an area not exposed to long periods of direct sunlight.
- The remote controller unit may not operate properly if the transmitter of the remote controller unit is pointed towards the floor or the seat of the vehicle.
- Since the transmitter employs an infrared system, it may not operate properly while the car stereo is exposed to direct sunlight. In such a case, block the sunlight from the sensor and then perform the desired operation.
- If the remote controller fails to operate unless it is brought close to the unit, it may indicate that battery power is low. Replace the batteries in the remote control.

Remote Controller Sensor



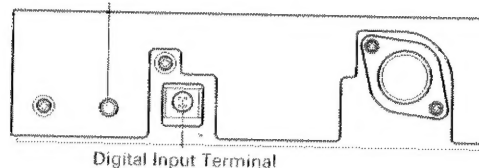
In the Event of Abnormal Operations

Press the Clear Button

If your unit exhibits abnormal symptoms such as the failure of the unit to power on, the lack of operation even when buttons are pushed, or abnormal display indications, electrostatic noise may be adversely affecting the operation of the built-in microcomputer.

Press the clear button with a thin pointed object, such as a pencil tip when these symptoms appear, as well as after the completion of wiring. Since pressing the clear button erases all control settings, you will have to make the respective settings again.

Clear Button



Using the Digital Input

- There is a digital output terminal on the multi-play CD player. When the output from this terminal has been connected to the digital input terminal on the Hide-away unit, "OPT.IN" will appear on the display.

Digital Input Indicator



- Note the following, when using the digital input terminal for sound input to the unit:

Caution

- Connect both the digital input-terminal and the RCA input-terminal. If the connection is not made to the RCA input-terminal, the spectrum analyzer won't be displayed.
- When combining the unit with the multi-play CD player "CDX-M50" and the head unit ("KEX-M900" or "DEX-M88") which enables inputting of disc titles:
Inserting or ejecting the compact disc magazine while listening to the tape or tuner will cause the sound to temporarily disappear. This is not an indication of a breakdown.

Special Features of the DEQ-7550

Incorporating SFC*

Five Kinds of Sound Field Programs [12]

- STUDIO
- JAZZ CLUB
- CONCERT HALL
- CATHEDRAL
- STADIUM

*SFC: Sound Field Control

For details, refer to the page number indicated in [].

Diverse Equalizing Function

- ① Parametric Equalizer [19]
Allows four-band adjustment on front and rear output separately.
- ② Graphic Equalizer [20]
Allows seven-band adjustment on front and rear output at the same time.
- ③ Parametric Bass/Treble [16]
Allows adjustment of bass/treble on front and rear output separately or at the same time.
- ④ Parametric Subwoofer/Center [21]
Allows adjustment of frequency and level of subwoofer/center.
- ⑤ Six Preset Memory for the User [22]
 - Memory Holding Function [3]
 - Memory Protect Function [23]



Multifunction Remote Control

- ① Adjustment of Main Volume [25]
- ② Equalizer Curve Control [25]
- ③ Switching of SFC Mode [25], Effect Adjustment [25]
- ④ Switching of Sources on Head Unit [26]

Staging Function

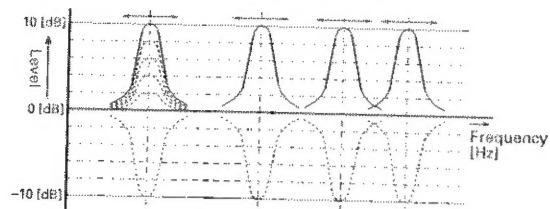
- Allows Selection of the Listening Position [11]
- Matches listening position of sound image to your position in the vehicle.
 - Image focus control enables fine tuning of the listening position of sound image to suit vehicle conditions.

Equalizing Function

The following three functions from the equalizing functions incorporated in the unit switch the sound to a digital signal for processing.

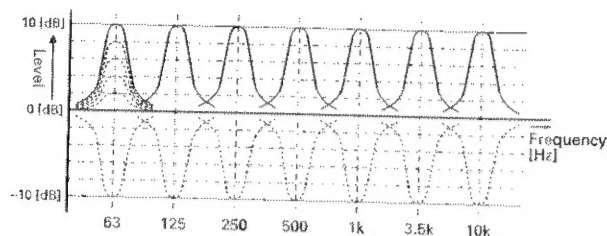
Parametric Equalizer

The parametric equalizer allows you to select four bands from 31 frequencies whose level you wish to adjust. It also allows separate adjustment of front and rear outputs.



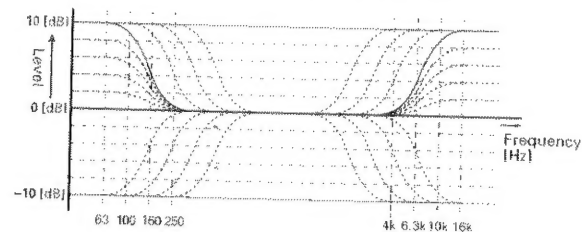
Graphic Equalizer

Allows you to adjust levels of preset seven bands.



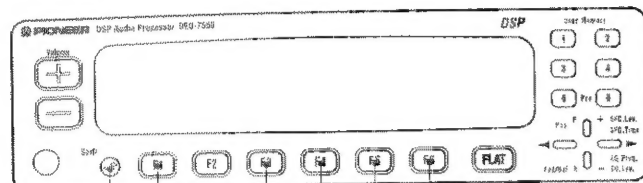
Parametric Bass/Treble

The unit's parametric bass/treble allows four stage selection of frequencies whose level you wish to adjust. It allows you to adjust the front and rear outputs separately or at the same time.



Selecting the Volume-tone Control Mode

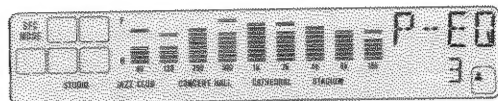
The unit incorporates the following modes for adjusting volume and tone. When setting volume and tone for each component, switch to the mode you wish to adjust first, using the illustration as a reference. For details, refer to the page number indicated in [].



Modes are switched using a combination of these buttons

Spectrum Analyzer Mode

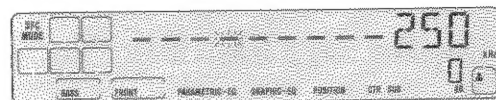
- Below are the four kinds of volume and tone is adjusted. Volume Adjustment [10], Fader Adjustment [10], Balance Adjustment [10], Sound Field Control (SFC) [12].



- The mode will switch with each press of the button

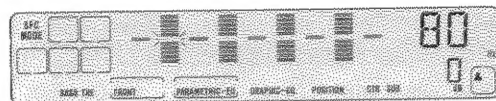
F1 : Bass and Treble Setting Mode [16]

- Adjust bass/treble on the front and rear output separately or at the same time.



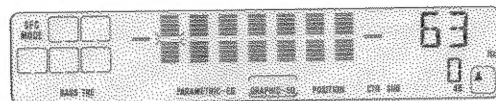
F3 : Parametric Equalizer Mode [19]

- Adjust parametric equalizer on the front and rear output separately.



F4 : Graphic Equalizer Mode [20]

- Adjust graphic equalizer.



F5 : Listening Position Setting Mode [11]

- Adjust the listening position of the sound image. Refer to "Using Listening Position" on page 12 for details.

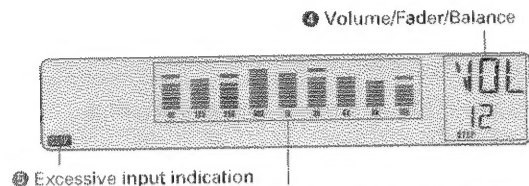
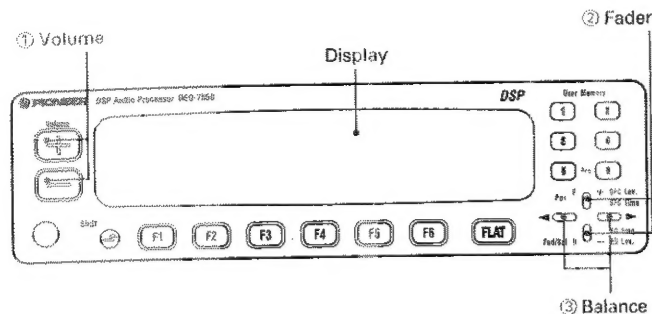


F6 : Sub-woofer/Center Setting Mode [21]

- Adjust frequency level of center and subwoofer output.



Adjusting the Volume



Spectrum Analyzer (Peak Hold) Display
The power levels of the 9 frequency divisions are momentarily held and displayed.

Before adjusting the volume

When you use the unit for the first time, set the volume of the head units (such as the cassette deck) to the desired level using the following steps in order to adjust the total volume on the unit.

1 Press the (-) side of button ① to set the volume of the unit to "VOL 0 STEP".

2 Set the volume of the head unit to "23".

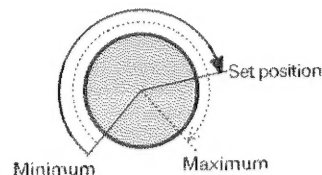
To adjust the volume on the head unit, refer to the Owner's Manual that accompanies the head unit.

Cautions in Adjusting Head Unit Volume

- When the head unit volume is excessive (excessive input to the unit), "CLIP" ⑤ will be indicated on the display as a warning. In this case, turn the volume on the head unit down to the point where "CLIP" is no longer displayed.
- When you feel a distortion in the sound even though "CLIP" ⑤ is not indicated on the display, turn the volume on the head unit down.
- The volume on the head unit will return to the initial setting when you remove the car battery or press the clear button on the head unit. In this case, set the volume again.

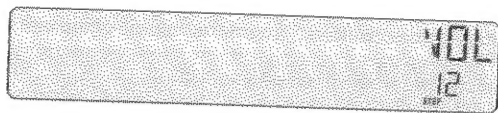
Note:

The volume's set point is not indicated on the display when you adjust the volume on the head unit by turning the volume control. In this case, set the volume control on the head unit to the position illustrated below, in accordance with step 2.



Adjusting the Volume

Pressing the (+) side of button ① increases the volume, while the (-) side of button ① decreases it.



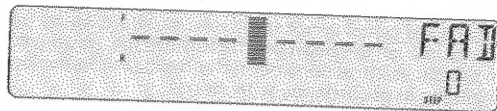
Notes:

- Always keep the volume inside the car at a level that allows you to hear outside sounds.
- Avoid high-volumes listening for long periods while the car engine is off or idling since this may exhaust the battery.

Adjusting the Fader

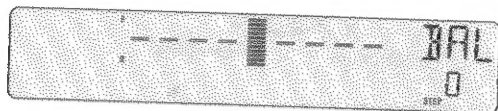
This function controls the balance between the front and rear speakers of a 4-speaker system. Pressing the upper side of button ② shifts the balance to the front speakers, while the lower side of button ② shifts it to the rear speakers.

For 2-speaker system, set to "FAD 0".



Adjusting the Balance

Pressing left side of button ③ shifts the balance to the left speaker, while the right side of button ③ shifts it to the right speaker.

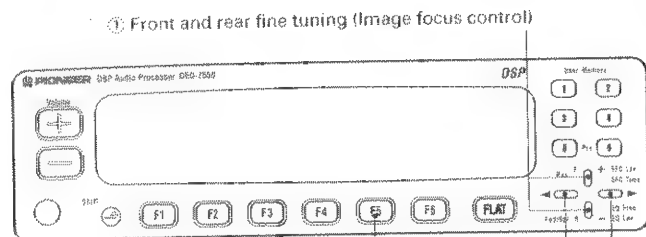


Notes:

- When you're adjusting fader or balance settings, the indicator v stop at the center setting.
- About 8 seconds after adjustment has been made, the display returns to its previous state.

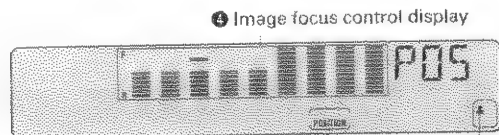
Using Listening Position

Correction of sound image in accordance with your position in the vehicle



③ Listening position

② Left and right fine tuning (Image focus control)



⑥ Listening position setting mode

⑤ Listening position

The distances to the front and rear, and left and right speakers will differ depending on your position in the vehicle. Therefore, the time it takes for the sound from each speaker to reach the listeners will vary, resulting in destabilized sound image. For example, the direction from which the vocals are heard may be unclear. This function allows you to adjust the level and the time lag in the sound from the front and rear, and left and right speakers, and stabilize the sound image.

Note:

- The listening position is adjusted to match your position in the vehicle. However, other listening position may be more effective, depending on the model of the vehicle and the positions of speakers. Compare the sounds and set the listening position to the one that allows you to enjoy the most natural sound.

1 Switch to listening position mode

(Refer to "Selecting the Volume-tone Control Mode" on page 7.)

2 Set the listening position to match your position in the vehicle.

Every time you press button ③, the mode switches as follows:

Driver's seat (Left hand drive)	Driver's seat (Right hand drive)	Front seat	Front and rear seats	No setting (The sound image listening position is not set)
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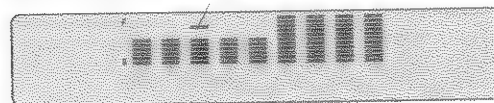


Note:

Setting is largely made by carrying out the operations up to step 2. Step 3 fine tunes the sound image listening point, enabling the sound to be set to the position where it is heard most naturally.

3 Use the image focus control function to fine tune the sound image listening point to the front and rear, and left and right directions.

This bar roughly indicates the sound image listening position



(Example: Indication of driver's seat (Left hand drive))

Pressing the upper side of the button ① allows fine tuning to the front, while pressing the lower side allows tuning to the rear. Pressing the left side of button ② allows fine tuning to the left, while pressing the right side of the button allows tuning to the right.

Using Sound Field Control

What is Sound Field Control?

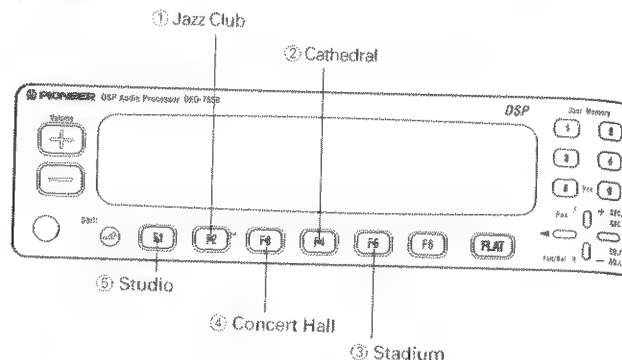
Creation of Sound Field

"Sounds" at a concert reach listeners from different directions and with different time lags. This is because the sounds resound in the space in the concert hall and resound off the ceilings and walls. But the sound field created in a vehicle is unique to the car audio. This is because it is not possible to obtain sufficient space or resonance in a vehicle. The DSP (Digital Signal Processor) incorporated in the unit processes sounds and creates five kinds of sound fields.

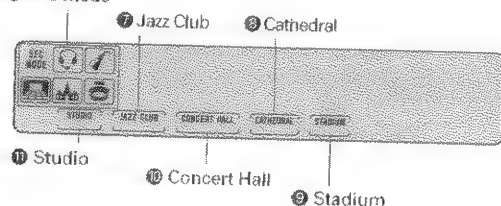
Note:

- As sound field control is most effective when the sound image is set at the listening position, refer to "Using the Listening Position" in the previous section to set the sound image at the listening position.
- Sound field control is more effective from the front output than the rear output of the unit. If you have a 2 speaker system, use the front output.

Using the Sound Field Control (SFC)


















⑥ SFC Mode



- Place the unit into spectrum analyzer mode.
[See "Selecting the Volume-tone Control Mode" on Page 7.]
- Select the sound field program.
Select a button from buttons ① to ⑤. (When you press the same button again, the button's function will be cancelled.)

Sound Field Program Stored in the Unit's Memory

Button	Symbol	SFC Mode	Outline of the Sound Field
		 (STUDIO)	The sound image is positioned to the front without echo. A basic sound field is created by processing initial sounds resounding against the walls of a relatively small mixing room.
		 (JAZZ CLUB)	The image of the sounds were taken from the space of a jazz club able to accommodate an audience of 50 to 100. This is most effective for use with live recordings. It creates very realistic echoes and sounds resounding against the walls.
		 (CONCERT HALL)	This creates the sounds of an exclusive classical music hall able to accommodate an audience of between 1,000 to 2,000. With resounded sounds at a time lag of 200 msec. and ample echo appropriately distributed to each speaker, you can enjoy expansive sounds and their depth.

Button	Symbol	SFC Mode	Outline of the Sound Field
		 (CATHEDRAL)	This creates the kind of sound field found in a church, mainly with ample, resonant echoes. This is effective with classical music. The feature of this setting is the enveloping echoes.
		 (STADIUM)	The image of the sounds were taken from a live performance at an outdoor stadium. Echoes are created by sounds resounding against distant walls. That effect creates a sound field that gives you the feel of the expansive space of a stadium.

Details of Sound Field Control

Principal Elements of a Sound Field

The sounds we hear at a concert hall, etc. are classified into the following three elements.

- **Direct sounds**

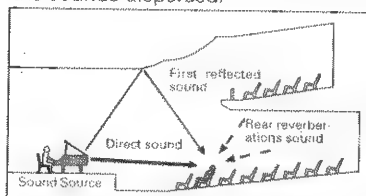
Sounds that reach the audience directly from the source.

- **First reflected sound**

Sounds that reach the audience after resounding against walls, etc.

- **Rear reverberations sound**

Sounds that reach audience from all directions. This is because in the process of repeated resounding, the sound level is reduced and the sounds dispersed.



The unit simulates the first reflected sound and rear reverberations sound as in a concert hall or stadium by switching the sounds to digital sounds and processing them.

Fig. 1

Characteristics of Sound Field Control

Original sounds are processed into digital signals to create direct sounds, first reflected sound and rear reverberations sound with the following characteristics (refer to Fig. 2 and Fig. 3). The sounds are then equalized and output.

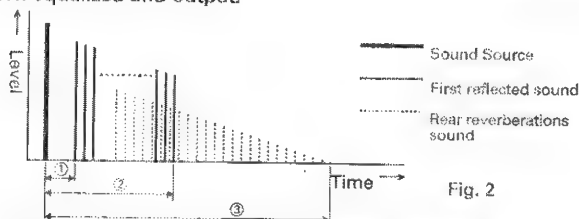


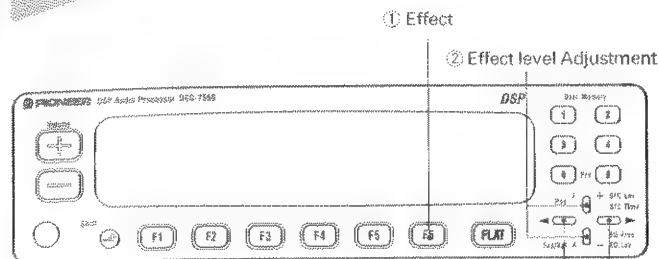
Fig. 2

- ① Time length from the direct sound to the first initial resonant sound
- ② Time length from the direct sound and the final later echo
- ③ Time length from the direct sound and the final rear reverberations sound

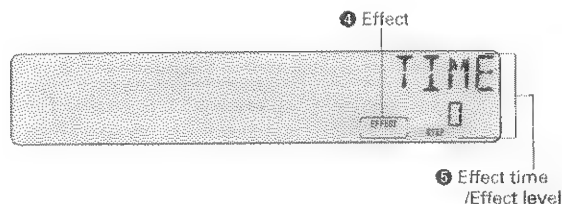
	①	②	③	Equalizing curve
STUDIO	16 [msec]	34 [msec]	—	
JAZZ CLUB	9 [msec]	129 [msec]	0.9 [sec]	
CONCERT HALL	28 [msec]	220 [msec]	2.1 [sec]	
CATHEDRAL	24 [msec]	198 [msec]	2.4 [sec]	
STADIUM	14 [msec]	205 [msec]	—	

①, ② and ③ indicate the figures for each program when the effect time is set to +/− 0. The effect level is set to +/− 0 and the listening position is cancelled.

Effect adjustment function



③ Effect time Adjustment



The effect adjustment function controls the "effect time" (time lengths shown in ①, ② and ③ in Fig. 2 on page 14) of first reflected sound and rear reverberations sound, both of which are elements that constitute the sound field and "effect level" (scale). The effect adjustment can be set separately for each sound field program. Refer to "Principal Elements of a Sound Field" on page 14 for an explanation on first reflected sound and rear reverberations sound.

1 Switch to Spectrum Analyzer Mode.

(Refer to "Selecting the Volume-tone control Mode on page 7)

2 Locate the sound field program whose effect you wish to adjust.

(Refer to "Using the Sound Field Control" in the previous section.)

3 Press button ① and switch to effect adjustment mode.

The frame of ④ will light on and off.



Note:

- "EFFECT" will not be indicated on the display when the sound field program has not been located. The unit will not switch to effect adjustment mode.
- When the unit is in effect adjustment mode, ("EFFECT" is indicated on the display and the frame ④ of the display lights on and off), fader/balance can not be adjusted. If you wish to adjust fader/balance, press button ① again to cancel the effect adjustment mode.

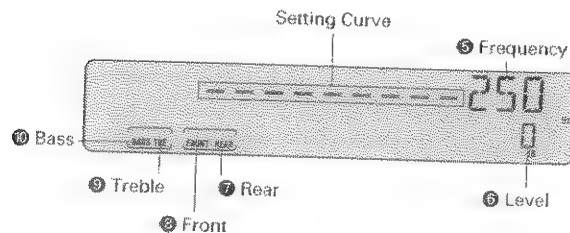
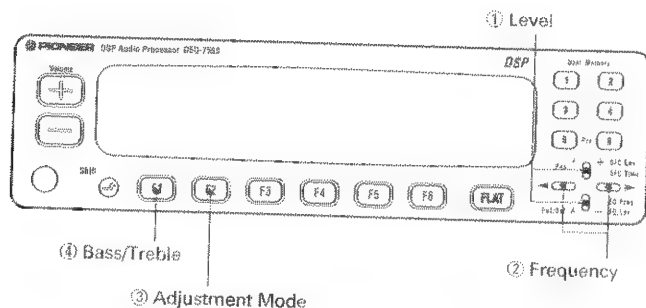
4 Adjust the "effect time" and "effect level"

Pressing the upper side of button ② will increase the effect level, while pressing the lower side will decrease the effect level. Pressing the left side of button ③ will shorten the effect time, while pressing the right side will extend the effect time.

Note:

When the individual sound field program has been located, the effect adjustment set point points are indicated for about one second in the order of the "effect time" and "effect level."

Adjusting Bass and Treble



Features of Bass and Treble Adjustment

- Changing to the tone adjustment mode allows you to adjust bass and treble of the front and rear speakers either separately or at the same time.
- You can set the desired frequency to serve as the basis of bass and treble adjustment can be set.
- The unit can be set to memorize different bass and treble settings.

Selecting the Tone Adjustment Mode

Your unit allows you to select two tone adjustment modes. Select the mode of your choice before adjusting the bass or treble.

Separate Adjustment Mode

In this mode, the tone of the front and rear speakers is adjusted separately.

Combined Adjustment Mode

In this mode, the tone of both front and rear speakers is adjusted at the same time.

① Place the unit into bass and treble mode.

[See "Selecting the Volume-tone Control Mode" on page 7.]

② Each press of button ③, will switch the adjust mode as follows:

Separate Adjustment Mode; Front Speakers

Separate Adjustment Mode; Rear Speakers

Combined Adjustment Mode



Adjusting Bass and Treble

This function allows you to select the frequencies to serve as the basis for bass and treble adjustments.

Using the Separate Adjustment Mode

In this mode, the tone of the front and rear speakers is adjusted separately. [See the previous section, "Selecting the Tone Adjustment Mode" for an explanation of the separate adjustment mode.]

1 Place the unit into Bass and Treble Setting Mode.

[See "Selecting the Volume-tone Control Mode" on page 7.]

2 Press the button ③ to select the set speakers whose tone is to be adjusted (front or rear).

[See the previous section, "Selecting the Tone Adjustment Mode" for an explanation of the separate adjustment mode.]

3 Press the button ④ to select bass or treble.

Each press of the button will switch it as follows:



4 Make the desired adjustment.

Adjust frequencies and bass and treble levels.

• Frequency

Pressing the left side of button ② will lower the frequency, while pressing the right side will raise the frequency. The following frequencies can be specified for of bass and treble adjustment:

Bass : 63 Hz → 100 Hz → 160 Hz → 250 Hz

Treble: 4 kHz → 6.3 kHz → 10 kHz → 16 kHz

• Level

Pressing the upper side of button ① will increase the level, while pressing the lower side will decrease the level.

-10dB → -8dB → → -2dB → 0dB → +2dB → → +8dB → +10dB

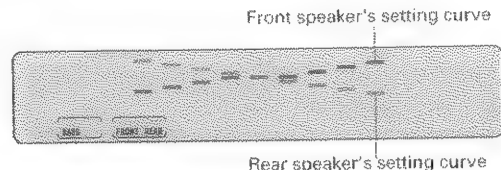
5 Repeat steps 2 to 4 to adjust the bass or treble of the other set of speakers.

Note:

When bass/treble are switched to combined adjustment mode after they are adjusted in their own mode separately, and when bass/treble in the front and rear output are switched to combined adjustment mode after they are adjusted in their own mode separately, front and rear settings done separately in their own mode will remain, and the bass/treble curves will be adjusted at the same time for those settings.

Points on the Use of the Combined Adjustment Mode After Adjusting the Tone in the Separate Adjustment Mode

- The set bass/treble curves are indicated simultaneously using a flashing bar (gray bar in the illustration below) for the rear setting and a illuminated bar (black bar in the illustration below) for the front setting.



- Adjusting bass/treble allows you to adjust frequencies and front and rear levels at the same time. However, when either the front or rear setting is at the maximum adjustment limit, further adjustment will not be possible.
- When front and rear bass/treble frequencies and levels are adjusted separately using their own modes, the frequency and level indicated on the display are the ones for front or for rear, depending on which was adjusted last.

Equalizer Adjustment

Using the Combined Adjustment Mode

In this mode, the tone of the front and rear speakers is adjusted at the same time. [See the previous section, "Selecting the Tone Adjustment Mode" for an explanation of the separate adjustment mode.]

1 Place the unit into Bass and Treble Setting Mode.
[See "Selecting the Volume-tone Control Mode" on page 7.]

2 Press the button ③ to select the combined adjustment mode.
[See the previous section, "Selecting the Tone Adjustment Mode" for an explanation of the separate adjustment mode.]

3 Press the button ④ to select bass or treble.
(Refer to step ③ in "Using the Separate Adjustment Mode.")

4 Make the desired adjustment.
(Refer to step ⑤ in "Using the Separate Adjustment Mode.")

Selecting the Equalizer Mode

Your unit provides the two equalizer modes described below. Select the desired equalizer mode before adjusting the equalizer.

Features of the Parametric Equalizer Mode

- Allows adjustment of any 4 frequencies (bands) in an range from 20 Hz to 20 kHz
- Allows the equalizer curve for the front and rear speakers to be adjusted separately.

Note:

When the parametric equalizer has been set, the spectrum analyzer mode display will indicate "P-EQ."

Features of the Graphic Equalizer Mode

- Allows level adjustments for frequencies of 63 Hz, 125 Hz, 250 Hz, 500 Hz, 1 kHz, 3.5 kHz and 10 kHz.

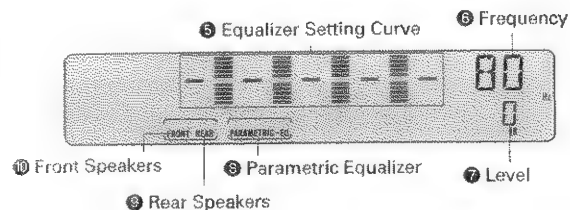
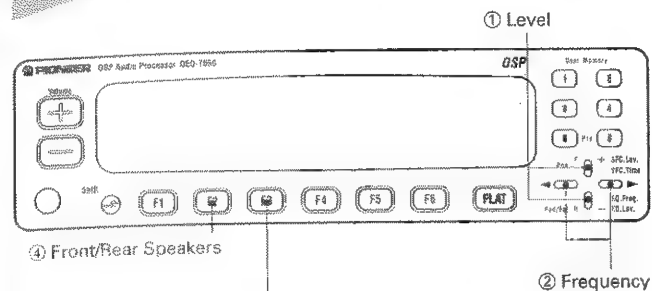
Note:

When the graphic equalizer has been set, the spectrum analyzer mode display will indicate "G-EQ."

Cautions in adjusting the Equalizer:

The levels for parametric and graphic equalizer displays can not be set at the same time. For example, switching to graphic equalizer mode and setting the level after you have set the frequency a level on the parametric equalizer will result in all bands of the parametric equalizer becoming flat (0 dB). Refer to "Using the Tone Control Memory" on page 22 to set and store memory tone controls.

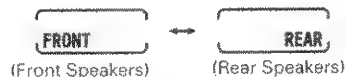
Using the Parametric Equalizer



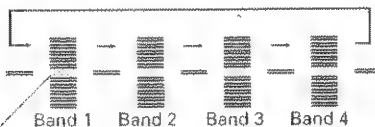
1 Place the unit into parametric equalizer mode.

[See "Selecting the Volume-tone Control Mode" on page 7.]

2 Press the button ④ to select the set of speakers (front / rear).



3 Press the button ③ to select the band to be adjusted.



Reverse bar flash to indicate the setting for the bands being set.

4 Set the desired frequency.

Pressing the right side of button ② increases frequency, while the left side decreases frequency.

Note:

- It is not possible to set frequencies with bands (band 1 to 4) overlapping each other.

5 Set the desired level

Pressing the upper side of button ① increases the level, while the lower side decreases the level.

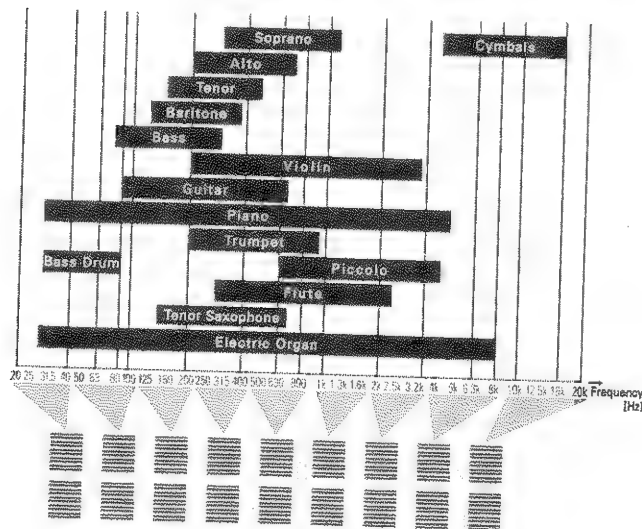
⑥ Adjust another band.

Repeat steps ③ to ⑤ for another band.

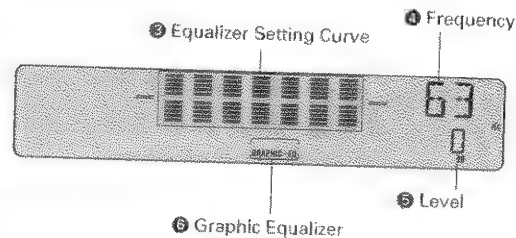
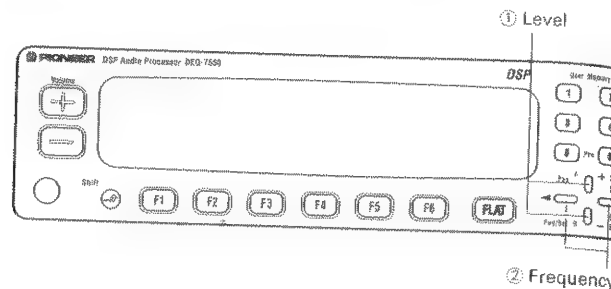
- Repeating steps ② to ⑥ allows you to set the equalizer curve for the front and rear speakers separately.

In adjusting frequencies:

- Frequencies being set (of frequencies which are possible to set) and band correspond as shown below. Adjust them using the illustration as a reference.



Using the Graphic Equalizer



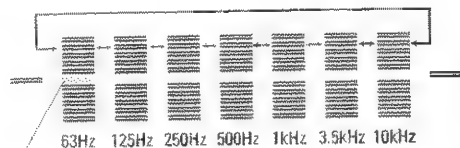
Adjusting the Sub-woofer/Center

1 Place the unit into graphic equalizer mode.

[See "Selecting the Volume-tone Control Mode" on page 7.]

2 Set the desired frequency.

Pressing the right side of button ② increases frequency, while the left side decreases frequency.



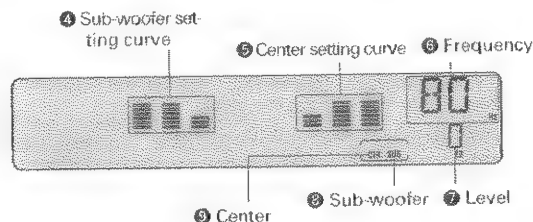
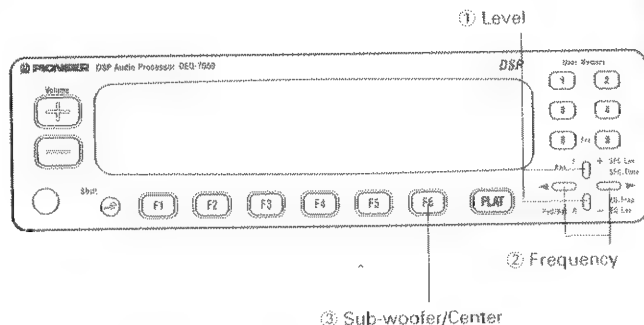
Reverse bars will flash to indicate the setting for frequencies which are to be set.

3 Set the desired level

Pressing the upper side of button ① increases the level, while the lower side decreases the level.

4 Set another frequency.

Repeat steps ② and ③.



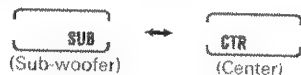
Adjust the frequency and level of the subwoofer and center output. The center speaker supplements missing sounds between left and right speakers. Enjoy the dynamic, heavy bass created by the subwoofer.

Using the Tone Control Memory

1 Place the unit into "Sub-woofer/Center Setting Mode".
[See "Selecting the Volume-tone Control Mode" on page 7.]

2 Press button ③ to select the output of Adjustment. (Sub-woofer/Center).

Each press of the button will switch it as follows:



3 Make the desired adjustment.

Adjust frequency and level of the subwoofer and center output.

- Frequency

Pressing the left side of button ② will increase the frequency, while pressing the right side will decrease the frequency. The following frequencies can be specified for of sub-woofer and center adjustment:

Sub-woofer : 50 Hz → 80 Hz → 120 Hz

Center : 300 Hz → 2.5 kHz → 6.0 kHz

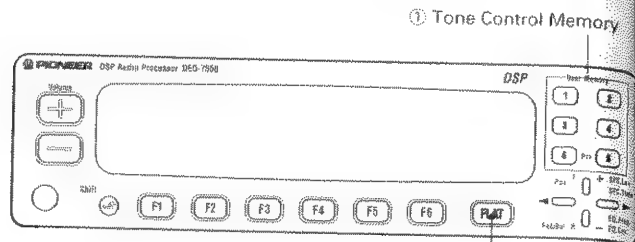
- Level

Pressing the upper side of button ① will raise the level, while pressing the lower side will reduce the level.

--- → -20dB → -10dB → -6dB → -4dB → -2dB
(OFF) 0dB → +2dB → +4dB → +6dB → +8dB → +10dB

Note:

- The sub-woofer/center output becomes a monaural output. The sub-woofer/center output is not changed by adjusting the balance of this set.



② Memory Protect

③ Memory Protect

④ Memory Number

The memory buttons can be used to memorize the bass, treble, and equalizer settings of your choice.

Memory Protect Function

The unit incorporates memory protect function to prevent you or the memory you have set for your favorite tone controls from being mistakenly erased. Once this function has been set, memory buttons (5) and (6) will become unavailable for tone control memory operations. Set the function when needed.

Note:

- The details stored in the memory buttons will be erased and the tone control memory cancelled when the car battery is removed or the reset button has been pressed. This will happen even if the memory protect function has been set. In this case, reset the function.
- The memory protect function will not be operating when you use the unit for the first time.

1 Hold down button ② for more than 2 seconds.

When you hold down the same button for more than 2 seconds, it becomes cancelled.

- Holding down the button for less than two seconds switches to the flat setting.

Note:

While you are setting the memory protect function, no indication will be on the display. Should you attempt to store memory in the memory buttons (5), (6), "PROT" ③ will flash on the display, indicating that the memory protect function is operating and memory is therefore unable to be stored.

Memorizing Tone Settings

Note:

Tone controls can be stored in memory while the unit is in the following three modes. Pressing a tone control memory button while the unit is in a mode other than the below three switches the unit to tone setting (refer to the next section).

"Bass and Treble Setting Mode"

"Parametric Equalizer Mode"

"Graphic equalizer Mode"

1 Adjust the bass and treble as desired.

[See "Adjusting Bass and Treble" on page 16.]

2 Adjust the equalizer.

[See "Equalizer Adjustment" on page 18.]

3 Memorize the setting.

Press and hold down one of the buttons in bank ① for at least two seconds.

- Holding down the button for less than 2 seconds recalls the previously memorized tone or equalization settings. [See next section.]

Note:

Memory can not be stored in tone control memory buttons (5) and (6) when the memory protect function has been set. Should you wish to store memory, cancel the function by referring to "Memory Protect Function" in the previous section.

Recalling Memorized Tone Settings

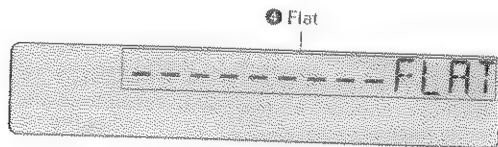
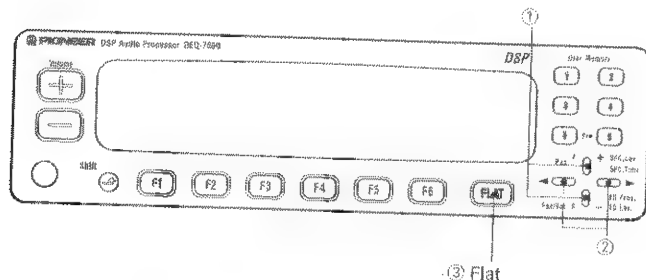
The following procedure allows you to recall tone and equalizer settings that have been previously memorized to the memory buttons.

1 Recall the desired tone setting.

Once a tone setting is assigned to a button in bank ①, you just need to press that button to set it in. This also causes the number of the button pressed to appear at position ④ on the display.

- Holding down the button for more than 2 seconds activates the memorization function. [See previous section.]

Checking the Results of a Tone Adjustment (Flat Function)



Flat Function

The flat function enables easy return of bass/treble and equalizer to their state (bass/treble and equalizer levels are all 0 dB) before setting. This is useful when you wish to check the effects of setting by switching bass/treble and equalizer subsequent to setting.

1 Press button ③. Press it again to return them to their original state. ("----FLAT" ④ is indicated on the display.)

- Holding the button down for more than two seconds switches the unit to memory protection function. (Refer to "Memory Protect Function" on page 23.)

Forced Flat Function

Pressing the frequency and level adjustment buttons are pressed while adjusting bass/treble and equalizer when the flat function is active will force bass/treble and equalizer to return to their original state (bass/treble and equalizer levels are all 0 dB.) This is convenient when you wish to set the levels from a flat state.

1 Set the flat function

(Refer to the previous section.)

2 Press one of the buttons ① and ②.

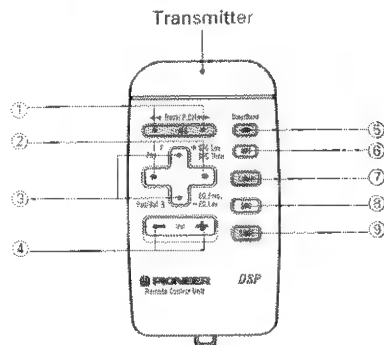
The flat function will be cancelled and all bass/treble and equalizer levels will become 0 dB.

Using the Remote Control

Operating DEQ-7550 by Remote Control

Operate DEQ-7550 using () buttons.

- Buttons marked in () are for operating the head unit only, while buttons marked in () are for operating the DEQ-7550 only.



②

Spectrum Analyzer Mode:

Balance Adjustment/ Effect time Adjustment (SFC)

Bass and Treble Setting Mode/Equalizer Mode:

Frequency Adjustment

③

Spectrum Analyzer Mode:

Fader Adjustment/ Effect Level Adjustment (SFC)

Bass and Treble Setting Mode/Equalizer Mode:

Level Adjustment

④ Volume

Press the (+) side to increase volume and the (-) side to decrease volume.

Note:

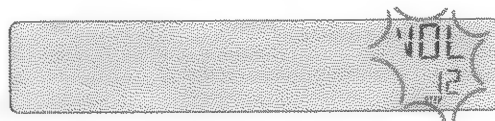
Use button ④ to adjust DEQ-7550 volume. The head unit volume can not be adjusted using this button.

⑥ Attenuator

Press to reduce the volume to 1/10 of its current setting.

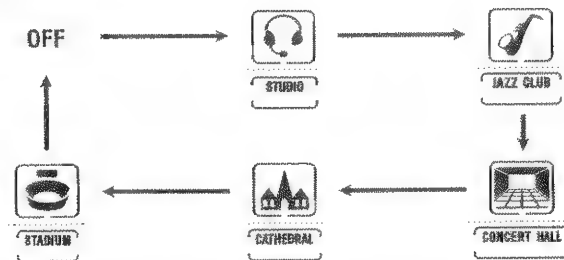
Pressing again returns the volume to its original level.

- This function is available using the remote controller unit only.



⑧ Sound Field Control Mode

Each press of the button will set the sound field control sound field program as follows:



Connecting the Units

Operating Head Unit by Remote Control

If your head unit can be operated by remote control, operations such as switching sources on the head unit can be done using the remote control which comes with the unit. Refer to the Owner's Manual accompanying the head unit for functions and how to operate.

①

During tape playback:

Fast Forward, Rewind/Music Search

During CD/Multi-play CD player playback:

Track Number Search

Step Number Search (ITP*)

*Special function for Multi-play CD player

While using the radio:

Preset

⑤

During tape playback:

Direction Change/Release

During Multi-play CD player playback:

Disc Number Search

While using the radio:

Band

⑦ Learn

The head unit learning function, which allows operation of functions of buttons stored in memory.

⑨ Source

This switches sources on the head unit.

Note:

- Button ④ works on the DEQ-7550. It doesn't adjust the volume on the head unit.

- Before Making final connections, make temporary connections then operate the unit to check for any connection cord problems.
- Refer to the owner's manual for details on connecting the various cords of the power amp and other units, then make connections correctly.
- Be sure to connect the memory power supply lead (orange) to a terminal that is always supplied with power regardless of the vehicle's ignition switch position.
- Don't pass the orange lead through a hole into the engine compartment to connect to the battery. This will damage the lead insulation and cause a very dangerous short.
- The separately sold digital fiber optic cable CD-D60 or a similar product must be used to connect the main unit with the multi-play CD player or CD player. To obtain the CD-D60, please contact your nearest PIONEER dealer.
- The Digital Fiber Optic Cable transmits light through its terminal structure and therefore should not be subjected to sharp bending or high pressure. If bending cannot be avoided, make sure the bend does not describe a circle with a radius of less than 25 mm. For details, refer to the precautions included with the Digital Fiber Optic Cable.

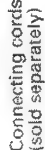
When using digital input

Even when using digital input, use analog input (RCA terminal) at the same time. Refer to example 2 of the connection diagram for wiring.

Upon Completion of Wiring

After wiring has been completed, use a sharp point such as a pencil tip to press the clear button on the Hide-away unit, main unit and the multi-play CD player.

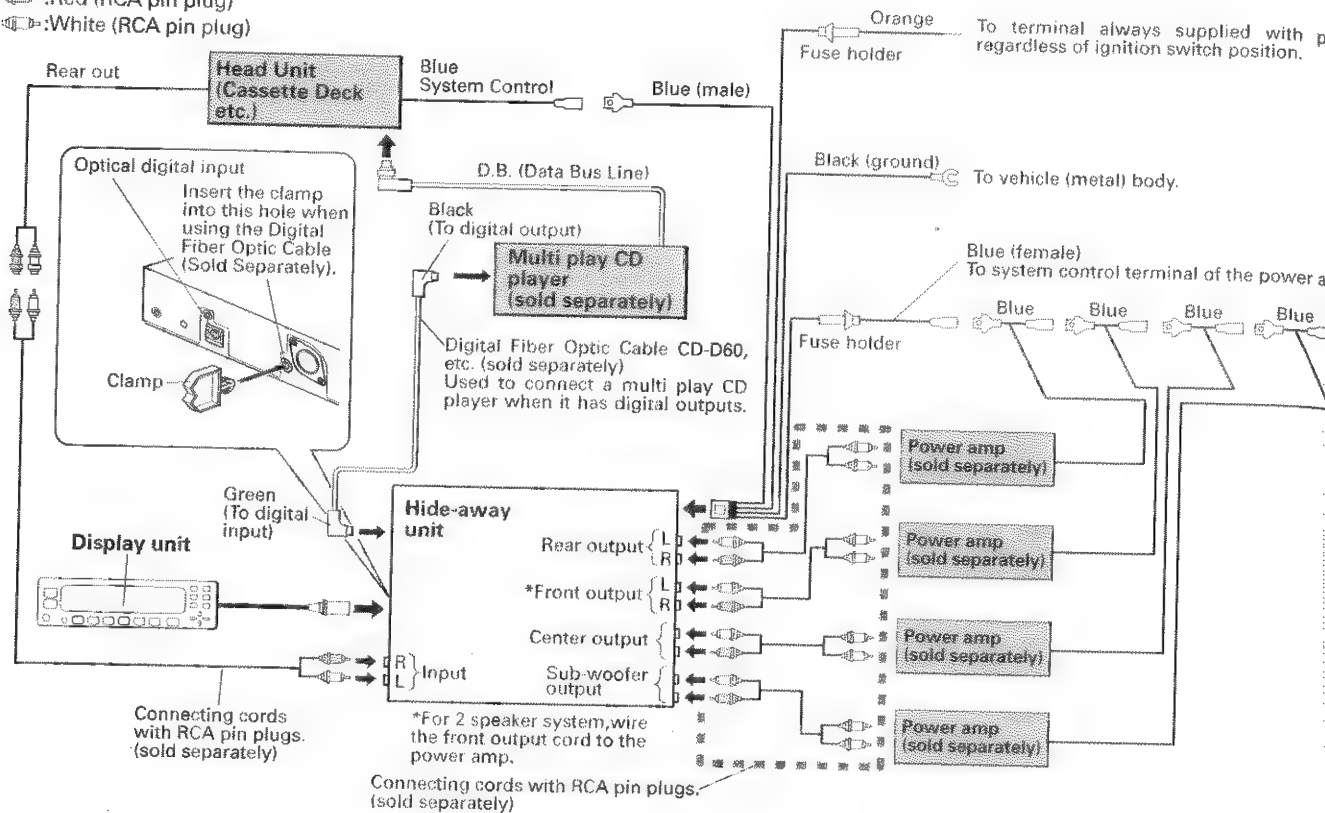
27



Example 2:

Red (RCA pin plug)

White (RCA pin plug)



Installation

- Be sure to use the parts supplied and mount the unit securely. If parts other than those supplied (specified) are used, they may loosen or damage internal parts.
- Be sure to install the unit in a place where the driver is not bothered and where there is no danger of passengers being injured in case of sudden stops.
- Be sure to consult your dealer before making any holes in the car.
- Cooling efficiency is degraded by making installations in hot places such as near the heater outlet, under floor mats that are tightly closed.
- Make sure to take off the (-) side connector on the car battery to prevent short circuits while you are mounting the unit.

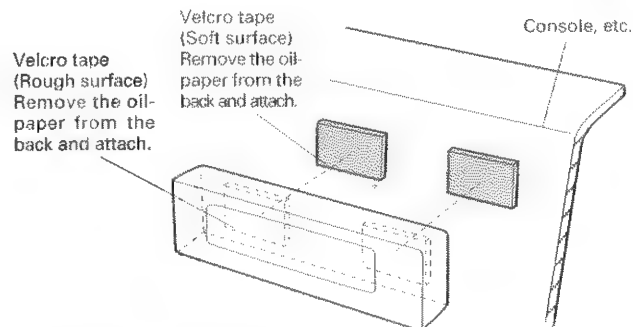
Installing the Display Unit

- When opening holes in the console, etc., confirm that there is no object at the rear of the console, and be careful not to cut off the power supply cord.
- When installing by using wood screws, make sure the tips of the screws do not contact the power supply cord, etc., as there is a risk that the cord may be broken due to vibrations of the car, which might cause a fire.

Mounting Example 1:

Fasten the display unit with Velcro tape

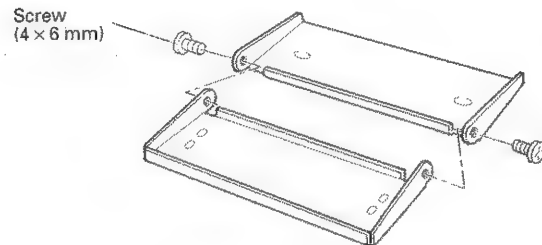
- Thoroughly wipe off the surface before affixing the Velcro tape.



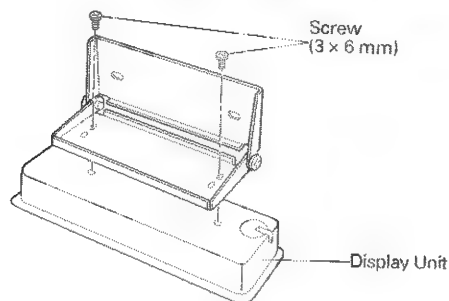
Mounting Example 2:

Installation of mounting bracket

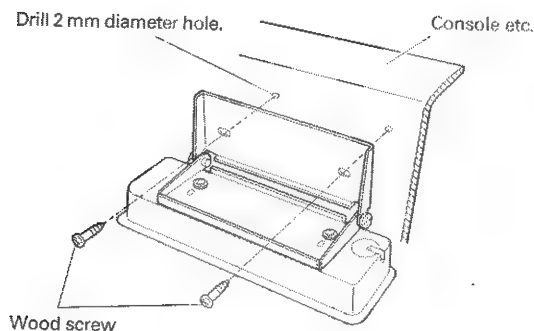
1. Temporarily assemble the bracket.



2. Use screws (3 × 6 mm) to install the bracket to the display unit.



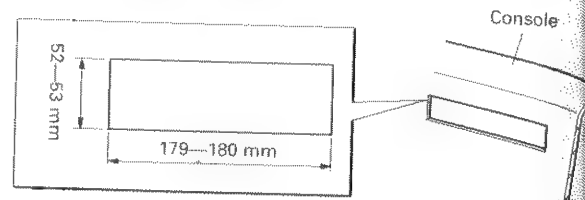
3. Use wood screws to install the bracket to the console. Adjust the angle so that the display unit is easy to see and fix with adjusting screws.



Mounting Example 3:

Installation using the flush mounting bracket

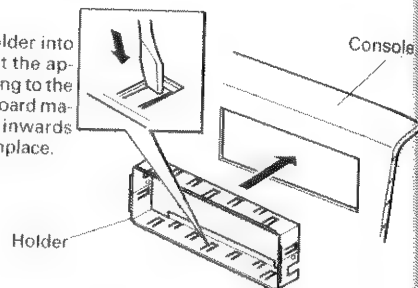
1. Start by opening installation holes in the console, etc., according to the dimension diagram below.



- A depth of minimum 25 mm is required for installation of flush mounting bracket.
 - Be careful not to open larger holes than those of the diagram above, as the holder cannot be fastened if the holes are too large.
2. Install the holder into the holes.

Holder

After inserting the holder into the dashboard, select the appropriate tabs according to the thickness of the dashboard material and bend them inwards to secure the holder in place.

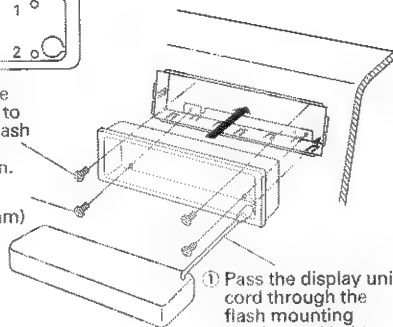


3. Install the flash mounting bracket to the holder.



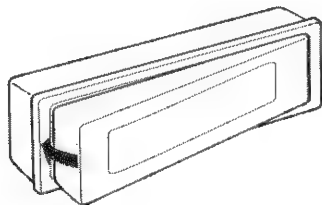
- ② Use screws to install the flash mounting bracket to the holder. Screw the flash mounting bracket in as shown in the illustration.

Screw
(2.6 × 4mm)



- ① Pass the display unit cord through the flash mounting bracket and holder.

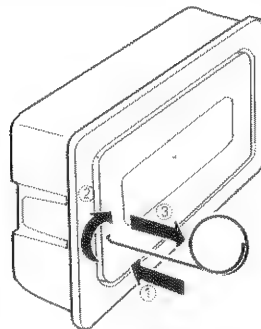
4. Install the display unit to the flash mounting bracket. Insert the right side and then push inn the left side until it locks.



Removing the Display Unit

How to Remove the Display Unit

Insert the release pin that comes with the unit as shown in the illustration. Turn it to the right and then pull it towards you.



Installing the Hide-away Unit

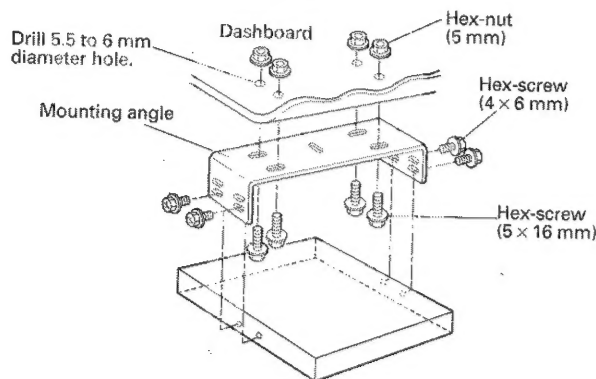
- Be sure to mount the Hide-away unit in places where the driver is not bothered and where there is no danger of passengers being injured in case of sudden stops.
- Rein water easily gets on the floor near the door. Also, don't make an installation on the driver seat base because it may interfere with the driver.
- For installations under the front seat, be sure not to obstruct the seat slide. Also, be extremely careful not to let the cords get caught in the slide mechanism where they may be damaged and cause a short.

Before mounting

To set the sound quality to the desired position, refer to the "High Pass Filter Switch" on page 3 before installing the hide-away unit.

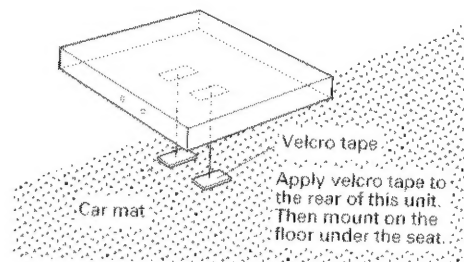
Mounting example 1:

Mounting the Hide-away unit below the Dashboard with the mounting angle.



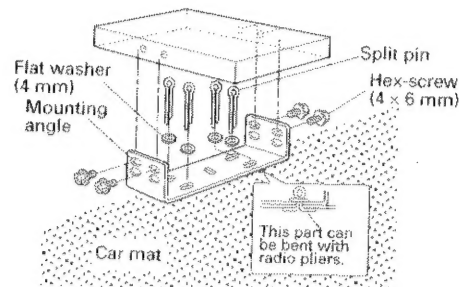
Mounting example 2:

Mounting the Hide-away unit on the car mat with cro tape.

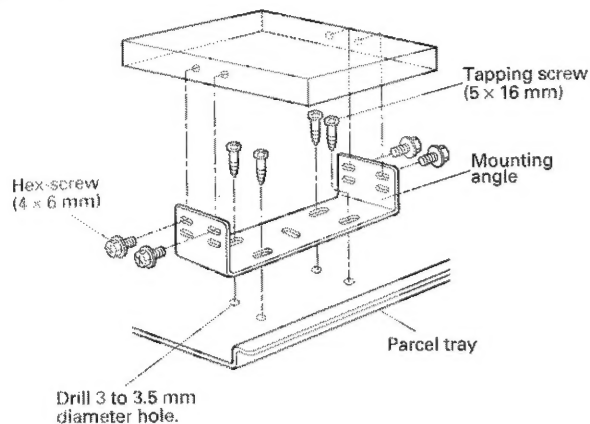


Mounting example 3:

Mounting the Hide-away unit on the car mat with mounting angle.



Mounting example 4: Mounting the Hide-away unit on the parcel tray with mounting angle.



- To assure proper operation of the unit, keep the vehicle interior temperature within a normal range using the vehicle's air conditioner or heater.
- When replacing fuses, be sure to use only fuses of the capacity prescribed on the fuse holder.
- When driving your vehicle, be sure to keep the volume of the unit set low enough allow you to hear sounds coming from outside.

In case of trouble

When the unit does not operate properly, contact your dealer or the nearest authorized PIONEER Service Station.

Specifications

Power source	14.4V DC (10.8 — 15.6 V allowable)
Grounding system	Negative type
Dimensions (Display unit)	170 (W) × 46 (H) × 25 (D) mm
(Hide-away unit)	203 (W) × 35 (H) × 178 (D) mm
Weight	1.4 kg
Tone controls (parametric)	
(Bass) Frequency	63 Hz, 100 Hz, 160 Hz, 250 Hz
(Treble) Frequency	4 kHz, 6.3 kHz, 10 kHz, 16 kHz
Equalization range	± 10 dB
Equalizer	
(4 band parametric EQ)	
Frequency	20 Hz, 25 Hz, 31.5 Hz, 40 Hz 50 Hz, 63 Hz, 80 Hz, 100 Hz 125 Hz, 160 Hz, 200 Hz 250 Hz, 315 Hz, 400 Hz 500 Hz, 630 Hz, 800 Hz 1 kHz, 1.3 kHz, 1.6 kHz 2 kHz, 2.5 kHz, 3.2 kHz 4 kHz, 5 kHz, 6.3 kHz, 8 kHz 10 kHz, 12.5 kHz, 16 kHz, 20 kHz
Equalization range	± 10 dB
(7 band EQ)	
Frequency	63 Hz, 125 Hz, 250 Hz, 500 Hz 1 kHz, 3.5 kHz, 10 kHz
Equalization range	± 10 dB
Sub-woofer output	
Frequency	50 Hz, 80 Hz, 120 Hz
Level	-∞ — +10 dB
Center output	
Frequency	300 Hz, 2.5 kHz, 6.0 kHz
Level	-∞ — +10 dB
Distorion	0.01 % (1 kHz, 250 mV, 20 kHz LF)
Frequency response	20 — 20,000 Hz (0, -1dB)

Signal-to-noise ratio	
(Optical Input)	96 dB (IEC-A method)
(RCA Input)	90 dB (IEC-A method)
Input level/Impedance	500 mV/ $\geq 10\text{ k}\Omega$
Output level/Impedance	500 mV/ $\geq 10\text{ k}\Omega$

Note:

Specifications and the design are subject to possible modification without prior notice due to improvements.

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